



The National Road

Conestoga wagons crossing the Appalachian Mountains on the National Road.



Federal Highway Administration

The tubular-arch bridge over Dunlap's Creek in Pennsylvania built by engineer Captain Richard Delafield for the National Road. It was the first cast-iron bridge in the United States.



Federal Highway Administration

As pioneers and immigrants settled west of the Appalachian Mountains, Americans felt a pressing need for reliable transportation routes to the newly formed states in the Ohio and Mississippi River basins. President Jefferson's Secretary of the Treasury Albert Gallatin and others proposed many road and river improvement projects to meet this need, but before 1840 only one received very substantial federal financial support. This was the National Road between Cumberland, Maryland, and Vandalia, Illinois, which the government built in 1811-1841 at a cost of over \$6 million.

Gallatin's Treasury Department supervised the construction of the first segment of the road, built between Cumberland on the Potomac River and Wheeling on the Ohio River in 1811-1818. The Corps of Engineers was given direction of the road's construction in 1825 when Congress authorized the continuation of the road west of the Ohio. The Secretary of War then ordered that the road be constructed following the method introduced in England by John McAdam. McAdam had found that applying three successive 3-inch layers of broken stone above ground level produced a well-compacted road surface that could bear the heaviest contemporary loads. Civilian superintendents reporting to the Engineer Department oversaw the road's construction until Congress, in 1832-1834, mandated that engineer officers be placed in immediate charge.

By then the road east of the Ohio River had fallen into serious disrepair, and Congress ordered that an engineer officer fix it and then turn it over for maintenance to the states through which it passed. That section of the road had been built with large foundation stones, and many of these had worked their way to the surface at dangerous angles. In return for subsequent state assumption of maintenance responsibilities, the federal government agreed to macadamize the road, to build a new route just west of Cumberland that avoided a steep mountain ridge, and to replace several decaying original bridges.

Engineer Captain Richard Delafield, a future Chief of Engineers, supervised most of the eastern repair work. His solid, new masonry bridge over Will's Creek west of Cumberland had two elliptical arches each spanning 59 feet and standing more than 26 feet above the water. With wing walls, its total length was 291 feet. He built across Dunlap's Creek at Brownsville, Pennsylvania, the first bridge with a cast-iron superstructure constructed in the United States, an 80-foot long span that remains in use today. The Cumberland Road project was an early example of the Corps of Engineers providing imaginative and durable engineering work under challenging circumstances.

Traveling on the National Road, 1939.